



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,352	06/14/2006	Wei Zhu	20296-002US1 OP050050	2233

26211 7590 10/26/2009
FISH & RICHARDSON P.C.
P.O. BOX 1022
MINNEAPOLIS, MN 55440-1022

EXAMINER

ABDALLA, KHALID M

ART UNIT	PAPER NUMBER
----------	--------------

2475

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

10/26/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

<p align="center">Advisory Action Before the Filing of an Appeal Brief</p>	<p>Application No. 10/565,352</p>	<p>Applicant(s) ZHU ET AL.</p>	
	<p>Examiner KHALID ABDALLA</p>	<p>Art Unit 2475</p>	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 08 October 2009 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ They raise the issue of new matter (see NOTE below);
- (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
- The status of the claim(s) is (or will be) as follows:
- Claim(s) allowed: _____.
- Claim(s) objected to: _____.
- Claim(s) rejected: 1-10.
- Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

/DANG T TON/
Supervisory Patent Examiner, Art Unit 2475

Continuation of 11. does NOT place the application in condition for allowance because:

Respond to Remarks/Arguments .

Claim Rejection: Applicant's arguments filed 10/08/2009 have been fully considered but they are not persuasive.

On claim 1, Applicants assert that Weinstein et al reference does not disclose obtaining by the MPLS table item managing module , specific egress port corresponding to the forwarding - relation table item based upon the next - hop IP address; also applicant's assert that Weinstein et al reference does not disclose using specific physical port based on a next-hop IP address. This argument is not found to be persuasive Weinstein et al reference disclose please see (Before a packet gets into an MPLS domain, a label stack is inserted before its network layer header to serve as a local identifier for an LSP. MPLS routers are called Label Switching Routers (LSR), with the two routers at the ends of an LSP referred to as the ingress LSR and the egress LSR, respectively. Packets are classified into Forwarding Equivalence Classes (FEC). Depending on the actual needs, FECs may be classified with different granularity. For example, an address prefix could correspond to one FEC, or a combination of source address/port number and destination address/port number can be used to designate all traffic between two end points as one FEC. At any LSR, incoming traffic belonging to the same FEC will be treated equally, i.e., sent out to the same interface with the same label. At the ingress router, a packet is assigned a label according to the FEC to which it belongs. When a labeled packet arrives at an intermediate router along an LSP, a process called label swapping is performed: The label in the packet is first extracted and the pair of (incoming port, incoming label) is mapped into a pair of (outgoing port, outgoing label). The incoming label is then replaced with the outgoing label in the MPLS packet and the packet is sent out to the outgoing interface. This process is repeated until the packet reaches the egress router where the MPLS label is stripped off the packet and the packet is forwarded through regular layer 3 forwarding. For label mapping purposes, Next Hop Label Forwarding Entries (NHLFE) are used at the LSRs. Each NHLFE contains the outgoing interface, the operation on the label stack and optionally, the layer 2 encapsulation for transmitting the packet. At the ingress LSR, an FEC-To-NHLFE (FTN) map is used for label creation. At each intermediate LSR, an Incoming Label Map (ILM) converts incoming labels into corresponding NHLFEs to convert the MPLS packets accordingly see paragraph [0066] lines 22-44). Also applicant's assert that Lyer et al does not disclose a node with an MPLS table item managing module , and does not disclose creating a table from the MPLS labels. This argument is not found to be persuasive Lyer et al reference disclose please see (FIG. 5 illustrates the creation of a label-switched path (LSP) on the global network according to an embodiment of the present invention. If

"hop-by-hop" routing is used and R2 44 is chosen as the next router, then R1 42 initiates a label request through R2 44. The request continues through the network to the egress router, e.g., from R2 44 to R3 46 to R4 48. Each intermediary router may receive a MPLS label from its downstream router: R3 46 receives a MPLS label from R4 48 and R1 42 receives a MPLS label from R2 44.

The LSP is established by the distribution of the MPLS labels. A label distribution protocol (LDP) or any other signaling protocol may be used in establishing the LSP see paragraph [0035] lines 1-12 and paragraph [0036] lines 1-6. When a router receives a label from the downstream router, the router establishes a table, e.g., a label information base (LIB). The following table illustrates an example LIB table for a packet stream. The LIB table ties together the input port, the incoming MPLS label, the output port and the outgoing port label. Input Port Incoming Port Label Output Port Outgoing Port Label 1 3 4 8 see paragraph [0036] lines 1-6) also see (FIG. 6 illustrates a plurality of routers including a label-switched path and corresponding label information base (LIB) tables for the label-switched path according to an embodiment of the present invention. For example, the initial router R1 42 may insert the MPLS label into the first packet and forward the packet to R2 44. Each subsequent router examines the port label of the received packet and replaces it with the outgoing label and forwards it to the next router see paragraph [0037] lines 1-9).